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10/676,991	09/30/2003	Harold N. Rosenstock	IS01407MCG	7257
23330	7590	04/12/2006	EXAMINER	
MOTOROLA, INC. LAW DEPARTMENT 1303 E. ALGONQUIN ROAD SCHAUMBURG, IL 60196			CHEN, TE Y	
			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/676,991

Applicant(s)

ROSENSTOCK ET AL.

Examiner

Susan Y. Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/30/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/30/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

Claims 1-30 are presented for examination.

### ***Drawings***

The Examiner contends that the drawings submitted on September 30, 2003 are acceptable for examination proceedings only.

### ***Abstract***

The abstract of the disclosure is objected to because the abstract contains identification number such as "(808", "(830)", etc. that are not shown in the drawings filed on record. Examiner requires Applicant delete these numbers.

Correction is required. See MPEP § 608.01(b).

### ***Specification***

The disclosure is objected to because of the following informalities: The use of the trademark "InfiniBand" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the used of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-30 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, the claims are not directed towards to final result that is "useful, tangible and concrete (See State Street, 149, F.3d at 1373-74 USPQ2d at 1601-02).

According to the new Guidelines of October 26, 2005, which states that "A claim limited to a machine or manufacture, which has a practical application, is statutory. In most cases a claim to a specific machine or manufacture will have a practical application. See Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557)...a specific machine to produce a useful, concrete, and tangible results (State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

(Interim Guidelines for Examination of patent Application for Patent Subject Matter Eligibility.

m<[http://rs6.net/tn.jsp?t=mdmd7pbab.0.kbg76pbab.p9qiiibab.7440&p=http%3A%2F%2Fwww.uspto.gov%2Fweb%2Foffices%2Fpac%2Fdapp%2Fopla%2Fpreognotice%2Fguidelines 101 20051026.pdf](http://rs6.net/tn.jsp?t=mdmd7pbab.0.kbg76pbab.p9qiiibab.7440&p=http%3A%2F%2Fwww.uspto.gov%2Fweb%2Foffices%2Fpac%2Fdapp%2Fopla%2Fpreognotice%2Fguidelines%2F101%2F20051026.pdf)>)

Examiner requests Applicant to include in Applicant's claimed limitations (in all the claims) the following:

Claim limitation describing –

1. What is the practical application?
2. What is the final result which Applicant considers concrete, useful and tangible?

Because the “practical application, result, concrete, useful and tangible” limitations are not claimed in Applicant's claims, Examiner asserts that the above listed claims are nonstatutory.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-46 of copending Application No. 10/676,484. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they claim the same limitations by using varying terminology.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/676,948. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they claim the same limitations by using varying terminology.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-42 of

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copending Application No. 10/676,744. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they claim the same limitations by using varying terminology.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/676,746. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they claim the same limitations by using varying terminology.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-30 are, rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1 and 17, the claimed subject matter "InfiniBand" is a trademark of InfiniBand<sup>sm</sup> Trade Association. These subject matters render the scope of the claim to be indefinite. See *In re Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982).

As to claims 2-16 and 18-30, these claims have the same defects as their base claims, hence are rejected for the same reason.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-30, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,985,956 issued to Luke et al. (hereinafter referred as Luke).

As to claim 1, Luke discloses a method as claimed, comprising:

a master subnet manager function updating database elements of an InfiniBand architecture subnet [e.g., the high speed fabric InfiniBand architecture, col. 5, lines 33-49; the Mediation Manager processing of Fig(s). 45-46 and associated texts];



creating a replicated set of the database elements at each of a set of standby subnet managers [e.g., col. 56, Session Creation/Termination section];

a standby subnet manager included in the set of standby subnet managers assuming the master subnet manager function [e.g., col. 7, lines 2-10; Fig. 8 and associated texts; col. 63, lines 3-28]; and

the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function initializing the InfiniBand architecture subnet using the replicated set of the database elements [e.g., col. 63, lines 16-28].

As to claim 2, Luke further discloses reinitializing the InfiniBand architecture subnet [e.g., col. 56, lines 21-27].

As to claim 3, Luke further discloses that the standby subnet manager included in the set of standby subnet managers that assumes the master subnet manager function managing the InfiniBand architecture subnet using the replicated set of the database elements [e.g., col. 63, lines 16-28].

As to claim 4, Luke further discloses that creating the replicated set of the database elements at each of a set of standby subnet managers out of band of the InfiniBand architecture subnet [e.g., the external LANs, servers, WANs at col. 5, lines 24-66; the external clients with a virtual service technique at col. 6, lines 23-34].

As to claim 5, Luke further discloses that creating the replicated set of the database elements at each of a set of standby subnet managers in-band on the InfiniBand architecture subnet [e.g., col. 17, lines 26-52; Fig. 16 and associated texts].

As to claim 6, Luke further discloses that creating in-band on the InfiniBand architecture subnet comprises creating using reliable multi-packet transaction protocol [e.g., the use of multicast protocol at col. 17, lines 26-31].

As to claim 7, Luke further discloses that creating in-band on the InfiniBand architecture subnet comprises creating using reliable connection transport service [e.g., the use of TCP/IP network at the unit 834, Fig. 8].

As to claim 8, Luke further discloses that creating in-band on the InfiniBand architecture subnet comprises creating using reliable datagram transport service [e.g., the use of TCP/UDP datagram transport service at Fig. 9 and associated texts].

As to claim 9, Luke further discloses that the replicated set of the database elements comprises an event subscription [e.g., col. 9, lines 35-41] .

As to claim 10, Luke further discloses that the replicated set of the database elements comprises a multicast record [e.g., the use of multicast protocol at col. 17, lines 26-31].

As to claim 11, Luke further discloses that the replicated set of the database elements comprises a service record [e.g., col. 58, lines 25-30].

As to claim 12, Luke further discloses the following:

the service record comprising a lease time [e.g., col. 16, line 29-33; col. 58, lines 45-54];

the master subnet manager function converting the lease time to a first end time [e.g., col. 16, lines 40-45];

the master subnet manager function converting the first end time to a remaining time [e.g., the load balance and timeout processing at Fig. 16 and associated texts]; and

the standby subnet manager included in the set of standby subnet managers converting the remaining time to a second end time, wherein the second end time is a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers [e.g., col. 18, lines 16-42].

As to claim 13, Luke further discloses the following:

the master subnet manager function periodically decrementing a lease time [e.g., the timeout processing at col. 35, lines 36-40];

the lease time becoming a remaining time; and

the standby subnet manager included in the set of standby subnet managers converting the remaining time to a second end time, and wherein the second end time is

a function of the remaining time and a local time at the standby subnet manager included in the set of standby subnet managers [e.g., col. 35, lines 27-45].

As to claim 14, Luke further discloses that the replicated set of the database elements comprises an extended node record [e.g., col. 44, lines 40-52].

As to claim 15, Luke further discloses that selecting the set of standby subnet managers based on a priority value and a globally unique identifier [e.g., the egress Network processing at col. 19, lines 14-16 & the IP addressing technique at col. 32, lines 51-57; Fig. 31 and associated texts].

As to claim 16, Luke further discloses that creating the replicated set of the database elements comprises periodically updating the replicated set of the database elements [e.g., col. 10, lines 35-44].

As to claims 17-30, these claims recite the same features as claims 1-16 in form of computer-readable medium, hence, are rejected for the same reason.

### ***Conclusion***

To expedite the process of re-examination, the examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. 35 U.S.C. 112) set forth by the Examiner prior to the office action, that applicant should

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provide and link to the most specific page and line numbers of the disclosure where best support is found (see 35 U.S.C. 132).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hospodor et al. (U.S. Patent No. 6,888,831) which discloses a distributed system with method for establishing a communication path through multi-dimensional computer to support isochronous data.

Hinshow et al. (U.S. Patent No. 7,010,521) which discloses a database optimizing appliance that processes database queries to support flexible configuration and overlapping functionality.

"Disconnection Modes for Mobile Database", Hoanne Holliday et al., Wireless Networks 8, 391-402, 2002, Kluwer Academic Publishers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen  
Examiner  
Art Unit 2161

March 27, 2006

  
**UYEN LE**  
**PRIMARY EXAMINER**